

Good practice from citizen
science and engagement
during an
emergency: the case of
SAFECAST in Japan
(and Europe)

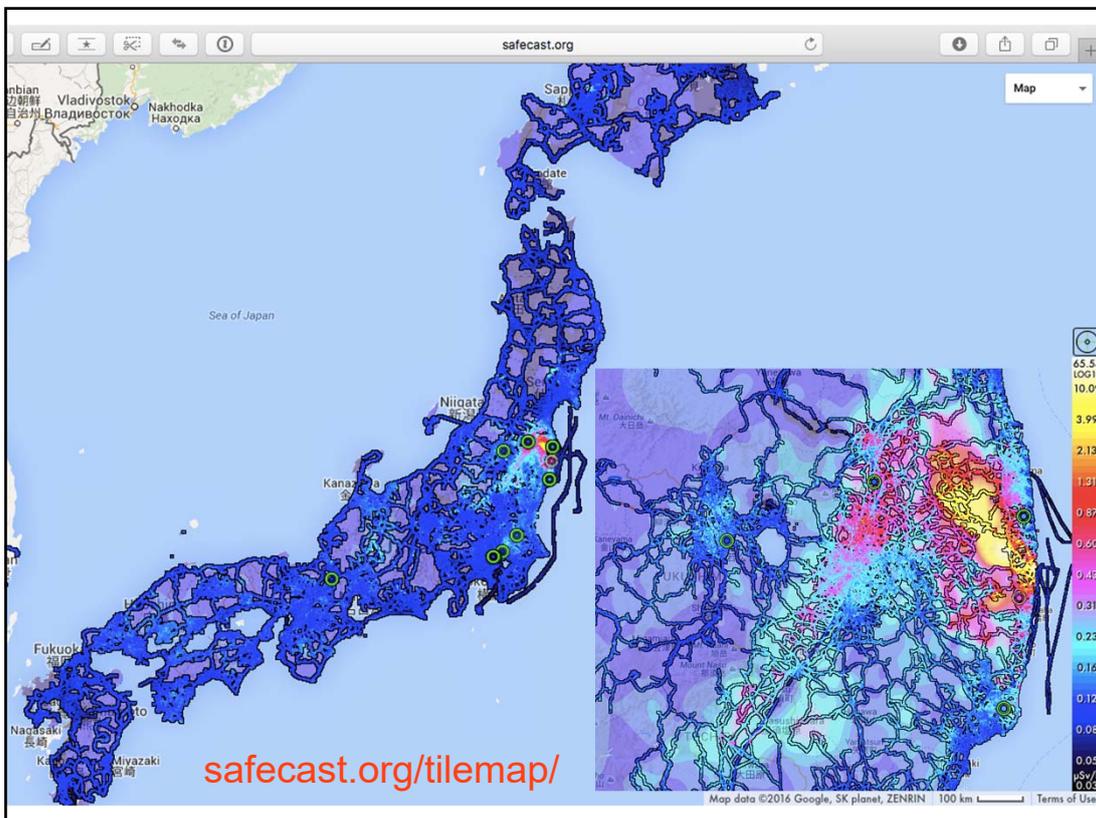
Azby Brown, SAFECAST
Pre-conference Workshop
Antwerp, June 11-12, 2018



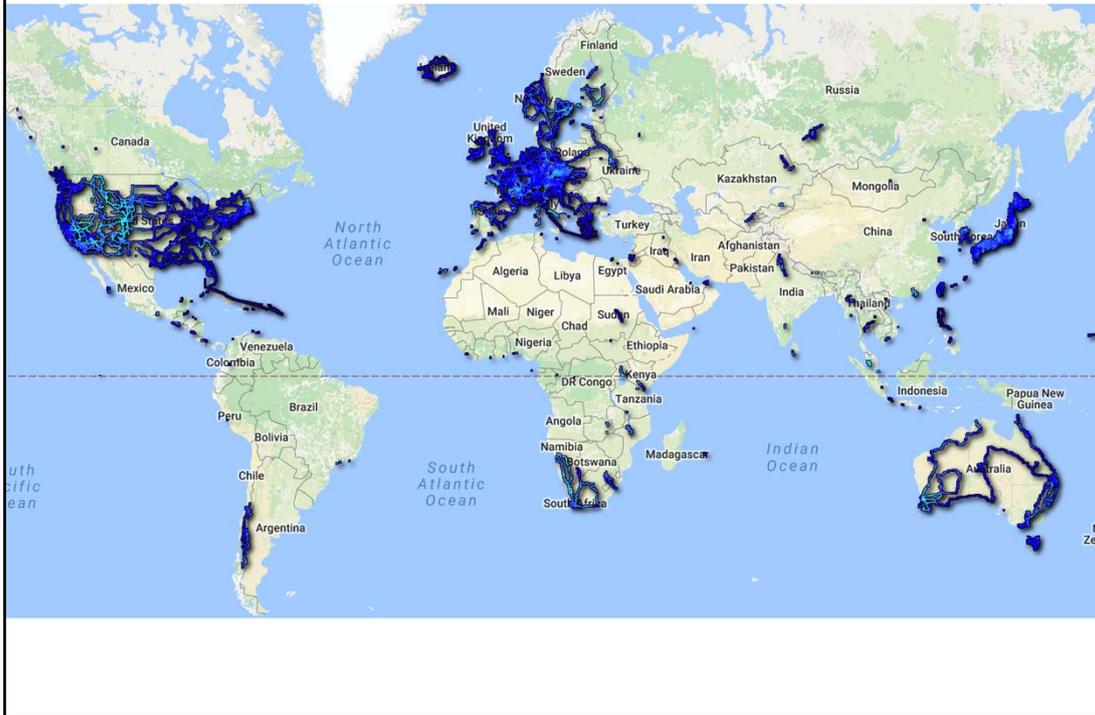
14:46:24 JST - March 11, 2011

Greater Eastern Japan Earthquake and Tsunami
Fukushima Nuclear Powerplant Accident

Information vacuum



~100+ COUNTRIES



Safecast “Good Practice” Approach:

As independent civil society

- Development
- Measurement
- Communication
- Education
- Engagement on Transparency



Fukushima Daiichi NPP Tritiated Water Issue

Fukushima Daiichi NPP Tritiated Water Issue

- ~850,000 tons of HTO, ~850 tanks
- 0.5 to 4 million Bq/L, ~0.76 PBq total
- Will run out of tank space in 2020
- Must start preparations in 2019
- No decision or public communication yet!
- “Waiting for fishermen to agree.”

the japan times

COMMENTARY / JAPAN

About that tritiated water: Who will decide and when?

BY AZBY BROWN

JUN 5, 2018

1500-word opinion piece
Critical of government inaction

<https://www.japantimes.co.jp/opinion/2018/06/05/commentary/japan-commentary/tritiated-water-will-decide/#.Wx89HTMRrGI>

Safecast Blog:

PART 1: RADIOACTIVE WATER AT FUKUSHIMA DAIICHI: WHAT SHOULD BE DONE?

Tuesday June 5th, 2018

4000-word detailed analysis w/sources

<https://blog.safecast.org/2018/06/part-1-radioactive-water-at-fukushima-daiichi-what-should-be-done/>

Background

- 2014: IAEA recommended controlled release
- Japan NRA also recommended
- Tritiated Water Task Force (METI) convened 2013, examined 5 options
- 2016 TWTF report recommended dilution (60,000 Bq/L) and controlled release
- Two years later, no action yet!

Background, cont'd

July, 2017: Takashi Kawamura, chairman of Tokyo Electric Power Company Holdings, Inc., said publicly that the decision to release the tritiated water had already been made.

Very strong public backlash,

Fishermen angry!

TEPCO forced to retract

08-04-17 10 63.5K

Fukushima Radiation: Days of Eating Pacific Ocean Fish Are Over, Or Worse...

One careless statement alone was damaging.

What does the science say?

- Lots of data from similar releases (Tokaimura, La Hague, Sellafield, etc)
- Tritium considered low-risk (WHO drinking water limit 10,000 Bq/L), but some uncertainty regarding OBT
- Independent researchers generally agree concentrations in marine life will be close to background, negligible risk to humans

Who are the Stakeholders?

- TEPCO
- Government (METI, NRA, etc)
- Fishermen
- Food distributors
- Public

“Inner” stakeholders ?

Who are the Stakeholders?

- Pacific nations
- Global consumers
- Environmental groups
- Nuclear issues community

“Extended” stakeholders ?

Fishermens' Cooperatives

- Seriously affected by 2011 disasters
- 2014-2015: Agreed to release of Daiichi bypass and subdrain water (3rd party monitoring; 1 Bq/L Cs137/Cs134; 5 Bq/L Gross beta (incl. strontium); 1500 Bq/L for tritium)
- Totally opposed to tritiated water release

Fishermens' Cooperatives

“We are totally opposed to the planned release...It’s not a question of money or compensation, nor of any level of concentration we might accept as safe. There aren’t any conditions we would set, saying ‘If you satisfy these conditions then we will agree.’ We do not think it should be our responsibility to decide whether or not to release it. That entire discussion is inappropriate.”

—Takaaki Sawada, Iwaki Office, Fukushima Prefectural Federation of Fisheries Cooperative Associations,

Fishermens' Cooperatives

“It’s not a question of scientific understanding. We understand that tritiated water is released from other nuclear power plants in Japan and around the world. But we think it will be impossible for the public in general to understand why tritium is considered low risk, and expect there will be a large new backlash against Fukushima marine products no matter how scientifically it is explained.”

—Takaaki Sawada, Iwaki Office, Fukushima Prefectural Federation of Fisheries Cooperative Associations,

TEPCO’s attitude:

- Seeks approval to release the HTO
- Accepts responsibility for the decision
- Acutely aware of mistrust
- Seeks full government support, including robust public communication efforts

TEPCO's attitude:

“The policies can't and shouldn't be determined by TEPCO alone, but we continue discussing the available options with government and other stakeholders. How much to empty the tanks, how that should be done to minimize environmental consequences, how to maintain trust and transparency, who we need to engage with on this matter, these are all issues we seek stakeholder engagement on. These discussions are taking a long time, but we consider them essential.”

—Takahiro Kimoto, General Manager, Nuclear Power & Plant Siting Division, Fukushima Daiichi D&D Engineering Company

Government's attitude:

- June 2018: All five options still under consideration
- Will be a decision of the Japanese Government as a whole
- Concerned with potential public reaction and reputational damage
- *“Will be based on ample discussions with all stakeholders.”*

— METI Director for Decommissioning and Contaminated Water Management, Nuclear Accident Response Office, Agency for Natural Resources and Energy

Public Hearings

- Planned public sessions announced at subcommittee meeting, Friday, May 18th.
- Content, location, and timing will be discussed in July.
- Possible to rush, hold events late 2018, but 2019 likely — at decision deadline!
- Some fishermen are likely to attend, cooperatives themselves will likely refuse.

Opinion

“Effective communication is essential, not to persuade the public that official plans are acceptable, but to better equip them to participate in the debate in an informed way, and to push back where they feel it is necessary.”

—Azby Brown, SAFECAST

Opinion, cont'd

“As it stands now, given the depth of public mistrust and the nature of misinformation in our current era, the situation is ripe for the maximum misunderstanding and negative social impact to occur if and when this tritiated water is finally released. “

—Azby Brown, SAFECAST

Opinion, cont'd

“Unfortunately, I think we should be prepared for things to be done the “Kasumigaseki way”: for the decision to be avoided until the last possible moment, and for government officials to claim then that an unavoidable emergency had arisen and it couldn't be helped.”

—Azby Brown, SAFECAST

Opinion, cont'd

“There will be negative social impact no matter what, but unless responsible government officials step up soon, own the decision, and ensure that public engagement is genuine, broad, and effective, these negative impacts will be unnecessarily magnified. “

—Azby Brown, SAFECAST

Opinion, cont'd

“Unless they think seriously about how to prevent this from becoming yet another clumsy exercise in DAD — “decide, announce, defend” — these meetings will be a mere fig leaf that will allow the government to claim it has adequately consulted the public.”

—Azby Brown, SAFECAST

Good Practice

- Transparency
- Enough time for stakeholder engagement
- Allow public to say “no.”
- Info for journalists
- Ongoing education
- Interagency coordination

Safecast’s Good Practice

As independent civil society:

- Engage decision-makers
- Engage other stakeholders
- Clarify the situation
- Spark awareness and discussion

